

## **AMENDMENTS TO THE SPECIFICATION:**

Page 1, please add the following new paragraphs before paragraph [0001]:

[0000.2] CROSS-REFERENCE TO RELATED APPLICATIONS

[0000.4] This application is a 35 USC 371 application of PCT/DE 03/02097  
filed on June 24, 2003.

[0000.6] BACKGROUND OF THE INVENTION

Please replace paragraph [0001] with the following amended paragraph:

[0001] ~~Specification~~ **Field of the Invention**

Please replace paragraph [0002] with the following amended paragraph:

[0002] The invention relates to a method and a system for monitoring the functional capability of a particle detector, using a particle filter connected upstream, in the flow direction, of the particle detector. The invention also relates to a computer program (computer program product) suitable for this **use in such a system**.

Page 2, please replace paragraph [0007] with the following amended paragraph:

[0007] ~~Advantages of the Invention~~

## **SUMMARY AND ADVANTAGES OF THE INVENTION**

Please replace paragraph [0009] with the following amended paragraph:

[0009] Particle filters are often regenerated, at certain time intervals or periodically, in order to restore the original filter capacity. For instance, ~~soot filters are periodically burned off~~, in order to detach soot particles that adhere to the particle filter, **soot filters are periodically burned off**, from the filter by oxidation processes at high temperatures. According to the invention, a measurement is now performed by the particle detector during this regeneration phase. The particles that occur during the regeneration are detected, and the resultant

measurement finding is compared with the finding to be expected. If there are marked deviations in the measurement finding from the expected finding, this is as a rule a clear indication that the particle detector is defective.

Page 4, please replace paragraph [0016] with the following amended paragraph:

[0016] The invention furthermore proposes a system for monitoring the functional capability of a particle detector, using a particle filter connected upstream of the particle detector in terms of the flow direction, in which a control and evaluation unit[[],] is provided, which during the regeneration of the particle filters detects measurement findings furnished by the particle detector and compares them with expected findings.

Page 6, please replace paragraph [0022] with the following amended paragraph:

[0022] ~~Drawings~~      **BRIEF DESCRIPTION OF THE DRAWINGS**

Please replace paragraph [0023] with the following amended paragraph:

[0023] The invention ~~and its advantages will now be~~ **is** described in further detail **herein below, with reference to** in an exemplary embodiment, in conjunction with the accompanying **single drawing figure which schematically shows a system for monitoring the functional capability of a particle detector according to the invention.**

Please delete paragraph [0024].

Please replace paragraph [0025] with the following amended paragraph:

[0025] ~~Preferred Embodiment~~

**DESCRIPTION OF THE PREFERRED EMBODIMENT**

Please replace paragraph [0027] with the following amended paragraph:

[0027] The soot detector 3 has a first electrode 5, which is connected to a high-voltage source HV via a line. The second electrode 4 of the soot detector 13 is embodied cylindrically and is connected to ground. The first electrode 5 and second electrode 4 are located coaxially to one another. The second electrode 4 has axial openings, or recesses 6, through which exhaust gas can flow. With the electrode assembly shown, an ion current can be measured that occurs from the arrival of charged particles at the electrodes 4 and 5. To that end, the ground line and the high-voltage line are carried into a control and evaluation unit 9, in which the further processing of the signals then takes place. It is understood that the supply of high voltage can also be done from outside the control and evaluation unit 9.

Page 7, please add the following new paragraph after paragraph [0033]:

[0034] The foregoing relates to a preferred exemplary embodiments of the invention, it being understood that other variants and embodiments thereof are possible within the spirit and scope of the invention, the latter being defined by the appended claims.